

GPH = **774.5** CDL = **5.724**

BOAT

Class **Mallard Start 7**
Designer
Builder
Age Date **01/1978**
Series Date **01/1977**
Offset File **CLned8946.off**

HULL

Length Overall **7.200 m**
Maximum Beam **2.478 m**
Draft **1.401 m**
Displacement **1,569 kg**
DLR **7.6659**
IMS Division **Cruiser/Racer**
Dynamic Allowance **0.278%**
Age Allowance **0.487%**

PROPELLER

Installation **No Propeller**
Type **N/A**
Diameter **N/A**

CREW

Maximum weight **324 kg**
Minimum weight **239 kg * when applied**
Non Manual Power
Crew Arm Extension

SAIL AREAS (m²)

	Measured	Rated
Mainsail	11.69	11.95
Headsail Luffed	18.91	18.91
Headsail Flying		
Symmetric	38.54	38.54
Asymmetric	31.87	32.29

* All asymmetric spinnakers with SHW/SFL > 85%

SAIL LIMITATIONS

Headsails **5**
Spinnakers **4** * Asymmetric may be tacked on the pole

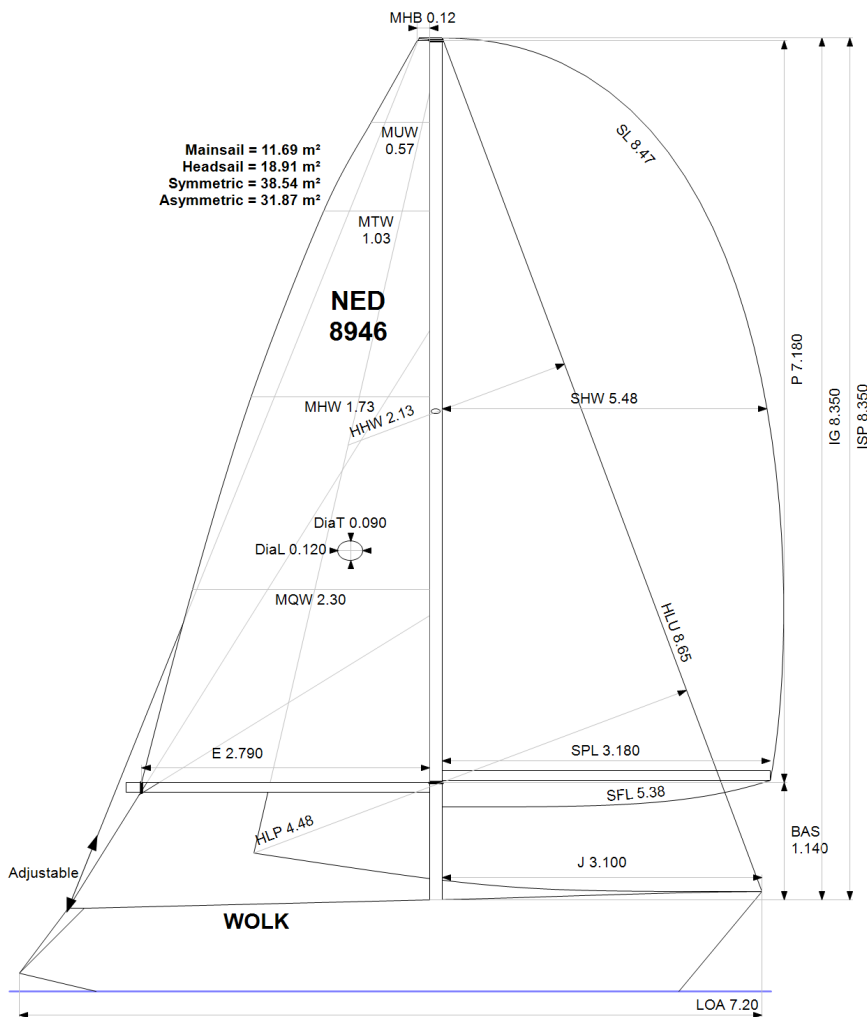
STABILITY

Righting Moment **25.2 kg·m**
Stability Index **N/A**

COMMENTS

BB motor aan spiegel bij meting

OWNER



Rated boat velocities in knots

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	42.8°	42.0°	42.0°	39.8°	39.4°	39.4°	40.9°
Beat VMG	2.74	3.26	3.68	3.98	4.09	4.12	4.02
52°	4.19	4.97	5.42	5.66	5.77	5.81	5.80
60°	4.43	5.22	5.58	5.79	5.92	5.98	5.99
75°	4.63	5.38	5.71	5.92	6.11	6.27	6.40
90°	4.58	5.42	5.83	6.10	6.27	6.42	6.77
110°	4.63	5.52	5.93	6.26	6.59	6.86	7.22
120°	4.49	5.44	5.88	6.22	6.58	6.92	7.47
135°	4.06	5.01	5.68	6.01	6.35	6.71	7.42
150°	3.51	4.41	5.21	5.74	6.04	6.35	7.00
Run VMG	3.04	3.82	4.54	5.19	5.66	5.96	6.56
Gybe Angles	149.0°	152.0°	153.0°	171.0°	180.0°	180.0°	180.0°

The owner certifies that he/she understands his/her responsibilities under ORC Rule and Regulations.

Time Allowances in secs/NM							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1313.4	1103.5	977.0	904.5	881.1	874.7	895.0
52°	858.2	724.7	663.9	636.4	624.1	619.8	621.2
60°	811.8	690.2	644.9	622.0	607.9	601.6	600.6
75°	777.7	668.8	630.0	607.8	589.2	574.1	562.8
90°	785.8	664.3	617.2	590.6	573.8	560.9	531.8
110°	778.4	652.3	607.5	575.2	546.6	524.8	498.8
120°	802.3	662.4	612.5	579.0	547.5	520.2	481.9
135°	886.0	718.3	633.8	598.6	566.8	536.6	485.4
150°	1024.4	817.1	690.8	627.6	596.4	567.2	514.3
Run VMG	1182.9	942.7	793.2	693.9	636.2	604.0	549.0
Selected Courses							
Windward / Leeward	1248.1	1023.1	885.1	799.2	758.6	739.3	722.0
All purpose	966.1	801.3	715.1	666.0	638.1	621.1	601.5

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	843.3	0.7115
All purpose	691.1	0.8682

Custom scoring options for Netherlands

Single Number	Time On Time
Triple Number Coastal/Long Distance Low	0.6790
Triple Number Coastal/Long Distance Medium	0.8738
Triple Number Coastal/Long Distance High	0.9708
Triple Number Windward/Leeward Low	0.5283
Triple Number Windward/Leeward Medium	0.7174
Triple Number Windward/Leeward High	0.8134
Coastal/Long Distance	0.7982
Predominantly Upwind	0.7959
Predominantly Downwind	0.8656

Data in meters/kilograms (Metric)

HULL AND APPENDAGES

Class	Mallard Start 7	LOA	7.200	VCGD	-0.482
Measurement	07/10/2017	Max. Beam	2.478	VCGM	-0.035
Measurer		Draft	1.401	RM Measured (kg·m)	25.2
HIN		Displacement	1.569	RM Default (kg·m)	24.4
Plan review		IMS L	5.996	Limit of positive stability (°)	N/A
Hull Construction	Solid	LSM0	5.893	Stability Index	N/A
Carbon rudder		Acc. length	7.200		
Light stanchions		Wetted area	11.27		
Trim tab		Sink (kg/mm)	7.79		

PROPELLER

Propeller Type **No Propeller**
PIPA **0.0000**

RIG

Forestay tension	Aft	P	7.180	E	2.790
Inner stay	None Fitted	IG	8.350	J	3.100
Carbon mast		ISP	8.350	BAS	1.140
Headsail furler		MDT1	0.090	FSD	
Mainsail furler		MDL1	0.120	SFJ	0.000
Articulated bowsprit	No	MDT2		SPL	3.180
Non-circular rigging		MDL2		TPS	
Fiber rigging		TL	-3.000	BD	
Runners/Checkstays		MW		MWT	
Spreaders	1	GO		MCG	

FLOTATION AND STABILITY

Inclining Test	Club Estimated VCG	SFFP	0.400	SAFP	6.568
Flotation Date		FFM	0.942	FAM	0.795
Measurer		FF	0.958	FA	0.808
Comment		LCFcl	4.030	LCFsh	4.179
		SG	1.0000	HBI	0.885

MEASUREMENT INVENTORY

Id	Item Description	Weight	LCG	VCG
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MAINSAIL

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Measurement	Manufacturer	Material	Comment
1	0.12	0.57	1.03	1.73	2.30	11.69		10/02/2018		Unknown	

HEADSAIL

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Btn	Flying	Area	Measurer	Measurement	Manufacturer	Material	Comment
1	0.06	0.54	1.06	2.13	3.27	4.48	8.65	No	No	18.91		10/02/2018		Unknown	

SYMMETRIC SPINNAKER

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Measurement	Manufacturer	Material	Comment
s2	8.47	8.47	8.47	5.48	5.38	38.54		11/06/2018	north sails	Unknown	201908-001

ASYMMETRIC SPINNAKER

Id	SLU	SLE	SL	SHW	SFL	Ratio	Area	Measurer	Measurement	Manufacturer	Material	Comment
1	8.12	7.30	7.71	4.86	5.36	91%	31.87		10/02/2018		Unknown	